

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) An adaptive pneumatic seat cushion and backrest cushion for vehicles and aeroplanes, each of the seat cushion and the backrest cushion comprising:
a plurality of low-elasticity textile tubular pockets arranged side by side such that adjacent sides of each tubular pocket are substantially contiguous along areas therebetween; contiguous areas of the plurality of tubular pockets being directly interconnected via seams;
wherein each of the plurality of tubular pockets comprises a pouch comprising an elastic plastic material with a valve;
wherein the plurality of tubular pockets are enclosed by a shell made of a textile material of low elasticity; and
wherein, when the plurality of pouches are filled with compressed air, the shell is tensioned ~~forming an actual seat or backrest surface via a top surface of the tensioned shell; and~~ wherein a top surface of the tensioned shell forms an actual seat or backrest surface.
2. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 1, wherein a plurality of tubular pockets in the seat cushion are arranged parallel to a direction of the seat and in the backrest cushion a plurality of tubular pockets are arranged in a top-to-bottom direction.
3. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 1, wherein the plurality of tubular pockets, both in the seat cushion and in the backrest cushion, are arranged across the seat.
4. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 2 wherein all of the plurality of tubular pockets in the seat cushion and in the backrest cushion are of the same size.
5. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 2, wherein the cross dimensions of the plurality of tubular pockets are selected such that optimum seating comfort can be achieved.
6. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 5, wherein each of the plurality of tubular pockets can individually be filled with compressed air.
7. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 2, wherein the cross dimensions of the plurality of tubular pockets vary with their longitudinal dimensions.

8. (PREVIOUSLY PRESENTED) The pneumatic seat cushion and backrest cushion according to claim 1, wherein at least one of said plurality of tubular pockets is sewn to the shell along further seams.

9. (CURRENTLY AMENDED) An adaptive pneumatic seat cushion and backrest cushion for vehicles and aeroplanes, each of the seat cushion and the backrest cushion comprising:

a plurality of low-elasticity textile tubular pockets, each tubular pocket having an elongated axis defined by a length of the tubular pocket, the tubular pockets arranged side by side such that adjacent sides of each tubular pocket are substantially contiguous along areas therebetween;

contiguous areas of the plurality of tubular pockets being directly interconnected via seams;

wherein a height of each tubular pocket varies along the length of the axis such that a minimum height is located near an approximate midpoint of the axis;

wherein each of the plurality of tubular pockets comprises a pouch comprising an elastic plastic material with a valve;

wherein the plurality of tubular pockets are enclosed by a shell made of a textile material of low elasticity; and

wherein, when the plurality of pouches are filled with compressed air, the shell is tensioned forming an actual seat or backrest surface via a top surface of the tensioned shell; and wherein a top surface of the tensioned shell forms an actual seat or backrest surface.